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7. APPLICATION SCORING MATRIX

Implementing an evaluation matrix enables assigning each application a score that is the total number of the points awarded in seven categories. A maximum total score of 1000 points can be awarded, based on the Application Review Flowchart replicated in Figures 4 through 11. This flowchart details the sequence of events followed to determine an applicant's score and is discussed in the paragraphs that follow. Its symbols are defined in Appendix I.

First, the allocation is placed in the frequency pool (Block #1 in Figure 4). If frequencies are available in the pool (a second iteration of the evaluation matrix could occur if all frequencies are not allocated in the first iteration), a window-opening announcement is made (Block #2 in Figure 4). The window period will be thirty days (Block #3). Next, the Region 55 Technical Subcommittee reviews the received applications for completeness (Block #4). After the thirty days have passed, the window closes (Block #5). Late or incomplete applications are rejected (Block #6). Applications received during the open-window period are reviewed (Block #7) by the RPUC and the Region 55 Technical Subcommittee.

The Technical Subcommittee will consult with State communications-planning administrators, if any such positions are staffed, to determine if the application complies with state plans (Block #8). An application that does not comply with an existing State plan will be rejected at this point (Block #9) and returned to the applicant, along with an explanation of the reason(s) for rejection. When an application has passed the test of State plan compliance, the Technical Subcommittee will apply the evaluation matrix (as shown Block #10, at the top of Figure 5).

Prior to allocating points for the seven categories, the evaluators conduct a needs-assessment review (Block #11) of the statement of needs for the requested frequencies provided by the applicant. This statement of need serves as an overview of the proposed system.

The seven categories of point awards are addressed in the seven subsections that follow.

7.1 Service (Category I, Block #12) - 350-point Maximum

Each of the eligible services has a predetermined point value as seen in Table 2, which follows Figures 4 and 5. Entities eligible to utilize spectrum in the 769- to 775-MHz and 799- to 805-MHz bands are defined in the FCC Code of Federal Regulations (47CFR90.523) and (47CFR90.20) Title 47, Volume 5, Subpart R. The point value assigned in this category is a factor of the number of subscriber units per service category, operating in a multi-agency system. An applicant with multiple services will be scored on a basis of the percentage that each service comprises of its total system. For example, a system that is 50% police and 50% local government (school administration) would be awarded the total of 50% of the point value for police plus 50% of the point value for school administration. Please refer to Table 2, Evaluation Matrix Point Values for Service¹⁰.

¹⁰ Reference: FCC Code of Regulations (47CFR90.523 and 47CFR90.20), Title 47, Volume 5, Subpart R.

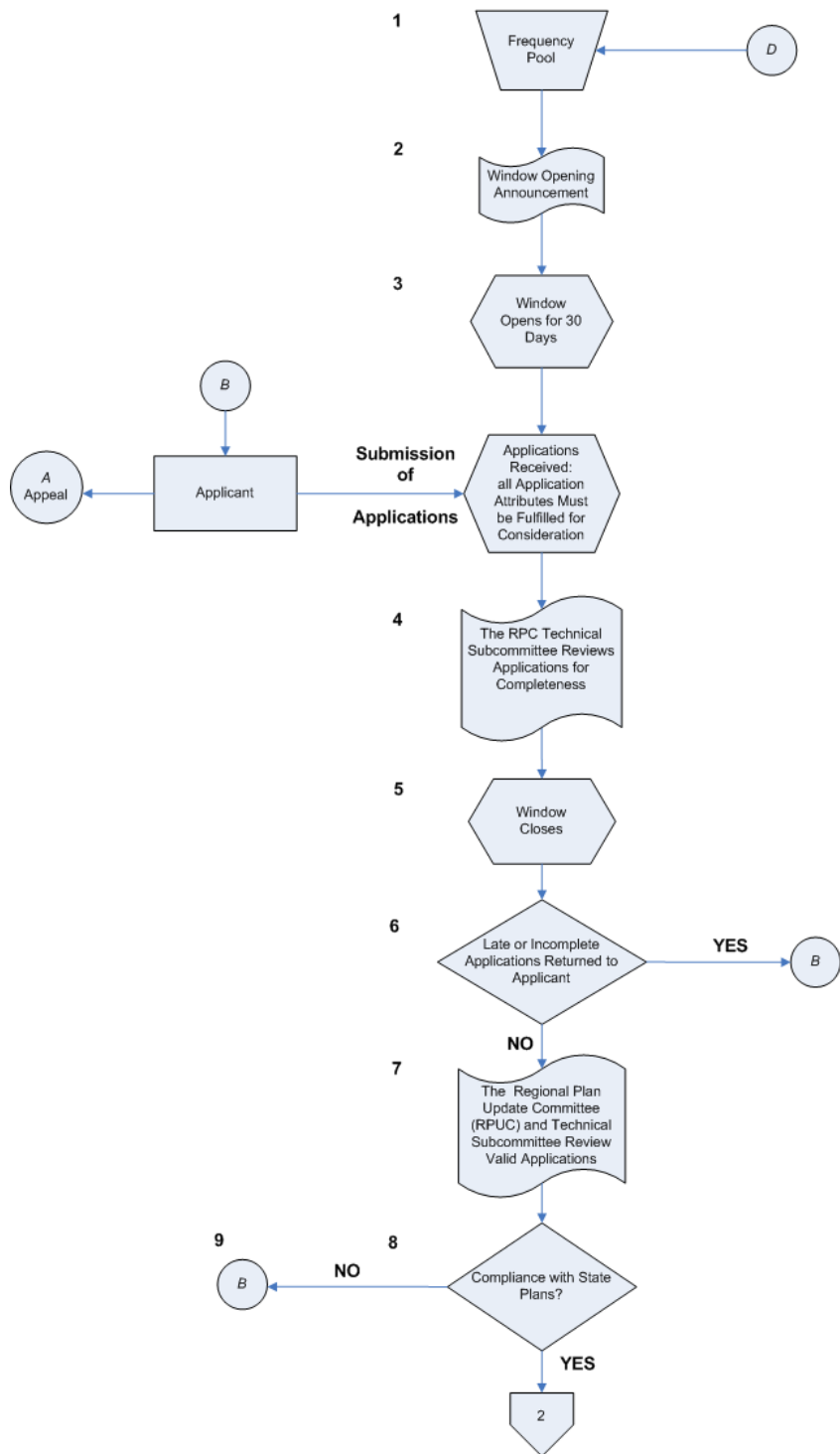


Figure 4, Application Review Flowchart - Page 1 of 8

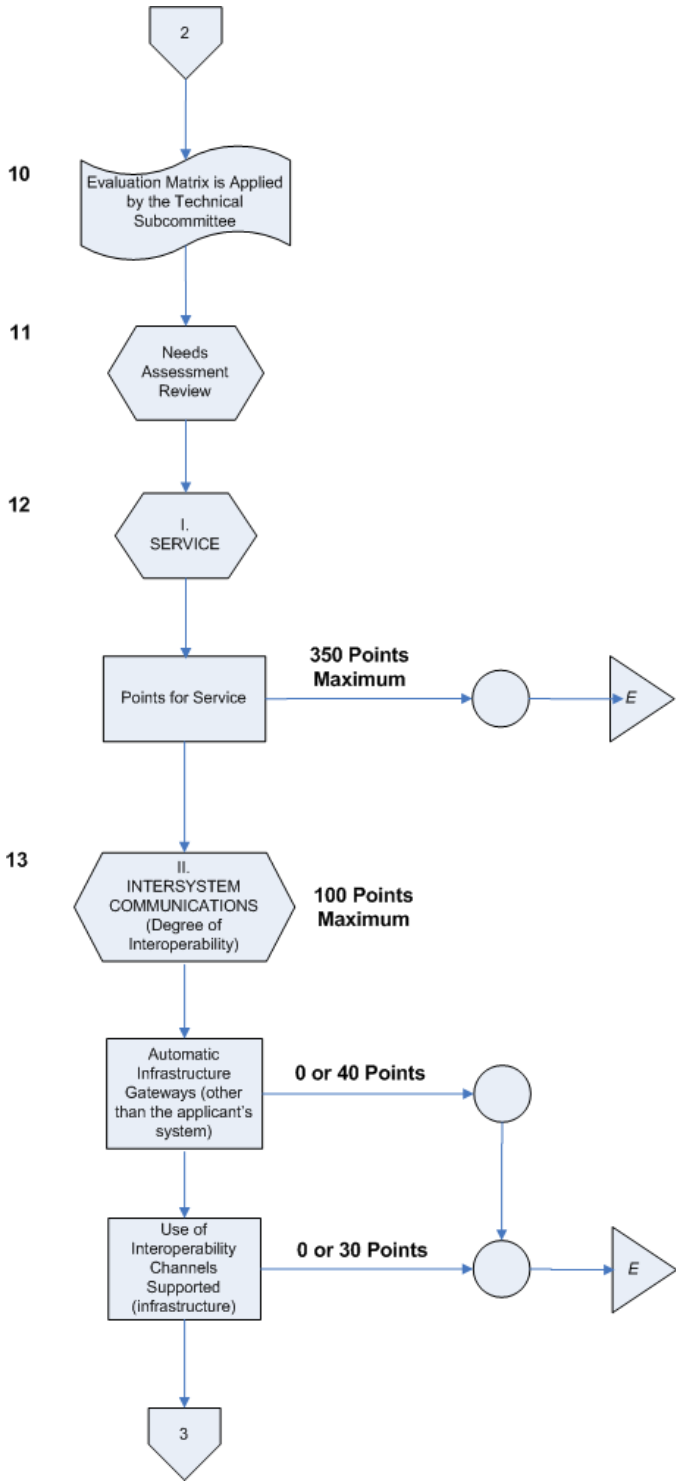


Figure 5, Application Review Flowchart - Page 2 of 8

Table 2, Evaluation Matrix Point Values for Service

Tier	Service Categories	Point Value
1	Fire	350
	Police	350
	EMS	350
	Rescue	350
2	Emergency Management	250
	Corrections	250
	Courts	250
	High-Volume Transit Systems (Serving > 500,000 passengers per day)	250
3	Beach Patrol (Special Emergency, SE)	225
	Hospital (SE)	225
	Forest Fire (SE)	225
4	Communications Standby Facilities (SE)	125
	Maintenance & Utility Boards - Government (SE – e.g., water, sewer, gas, electric)	125
	Other Government Agencies (e.g., building inspectors, elderly services)	125
	Disaster Relief Organizations (SE)	125
	Auxiliary Police (SE)	125
5	Security Patrol - Government (SE)	100
	Schools - Government, Districts - (SE – e.g., school buses)	100
	Veterinarians - Government (SE)	100
6	Partial Coach - Government (SE – transit systems)	75
	Physicians - Government (SE)	75
	Communications System Repair (SE)	75
7	Parks and Conservation – Government (exclusive of police, forest fire)	50
	Physically Disabled - Government (SE – e.g., personal alarm services)	50
8	Other (To be Determined, TBD)	25

7.2 Intersystem Communications (Category II, Block #13) - 100-point Maximum

The application (Block 13 in Figure 5) is scored — with a range of points from 0 to 100 — based on the degree of interoperability that is demonstrated. This category rates the application on the interoperability capabilities of the proposed system, the inclusion of the common interoperability channels, and the ability to communicate with different levels of government and services during times of emergency. Points are awarded based on the sum of the criteria weights in Table 3 that apply.



Table 3, Intersystem Communications Criteria and Weights

Interoperability Demonstrated	Point Value
Provides automatic infrastructure gateways (other than the applicant's system)	40
Use of interoperability channels is supported (infrastructure)	30
Provides console patches to other systems (other than the applicant's system)	10
Communicates with other systems with which the Agency holds mutual-aid agreements	10
All subscriber units have the tactical interoperability channels programmed within them	10
No interoperability or intersystem criteria information is provided	0

7.3 Loading (Category III, Block #14) - 150-point Maximum

As shown with Block #14 in Figure 6, applicants are scored on the number of subscriber units that will operate on each radio channel (the loading). The applicant shall receive a maximum score of 150 points in this category. For example, a proposed system that 1) has loading greater than or equal to 250 subscriber units, and 2) is an expansion of an existing 700-MHz and/or an 800-MHz system shall be awarded 150 points (sum of first and third lines in Table 4).

Table 4, Loading Criteria and Weights

Loading and Expansion Factors	Point Value
System loading is \geq 250 subscriber units per radio channel	100
System loading is \geq 200 but less than 250 subscriber units per radio channel	50
Expansion of an existing 700-MHz and/or 800-MHz radio system	50
System loading is \geq 100 but less than 200 subscriber units per radio channel	10

7.4 Spectrum-Efficient Technology (Category IV, Block #15) - 100-point Maximum

Category IV (Block #15 in Figure 7) scores the applicant on the degree of spectrum-efficient technology the system demonstrates. A point-value range of 0 to 100 points can be awarded for this category. A trunked system, an integrated voice and data system, and a system utilizing 6.25-kHz spectral efficiency are all considered to utilize spectrum-efficient technologies. The spectral efficiency for a voice or data channel is based on the throughput divided by the channel bandwidth.

Applicants shall be awarded a maximum of 100 points in this scoring category as per the applicable criteria weights in Table 5.



Table 5, Voice and Narrowband Data Technology Criteria and Weights

Technology Utilized	Point Value
Trunked system design	50
6.25-kHz effective spectral efficiency	50
Integrated voice and data system - voice system that integrates mobile data on the same channel(s)	50

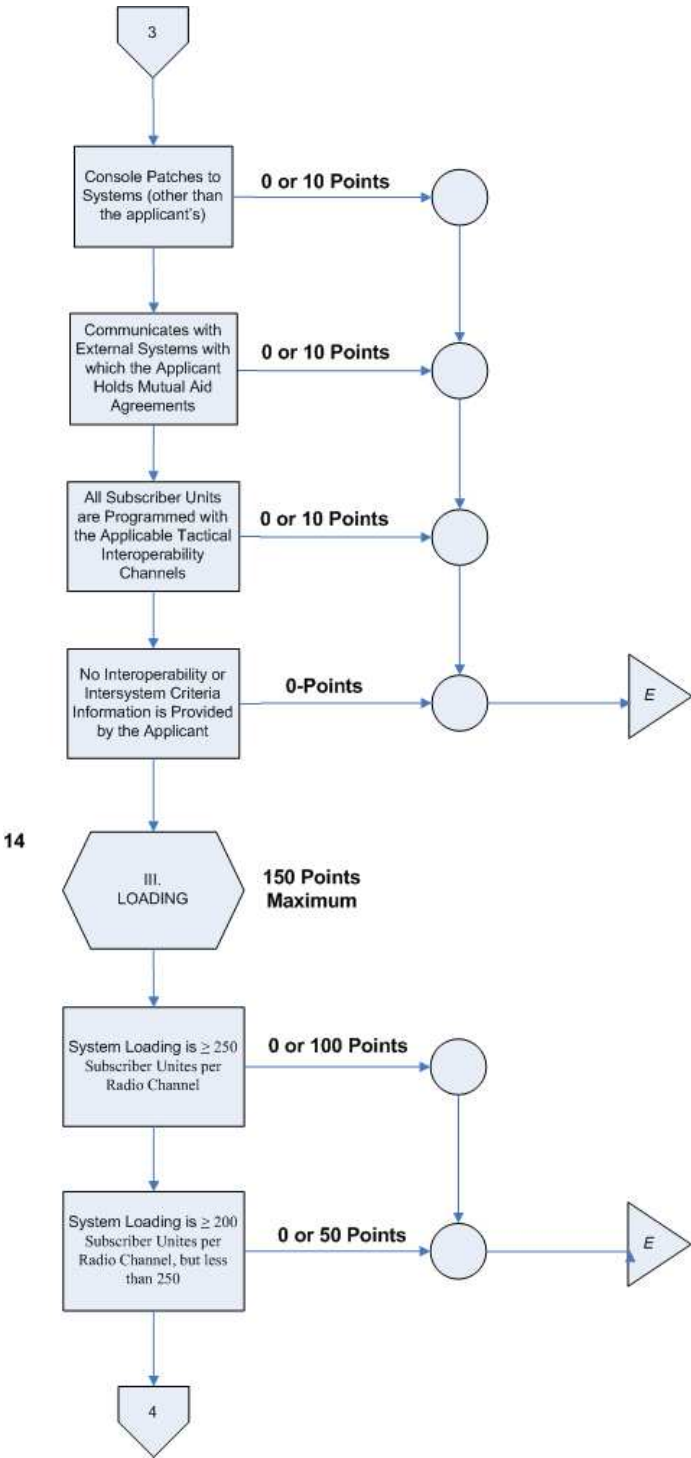


Figure 6, Application Review Flowchart - Page 3 of 8

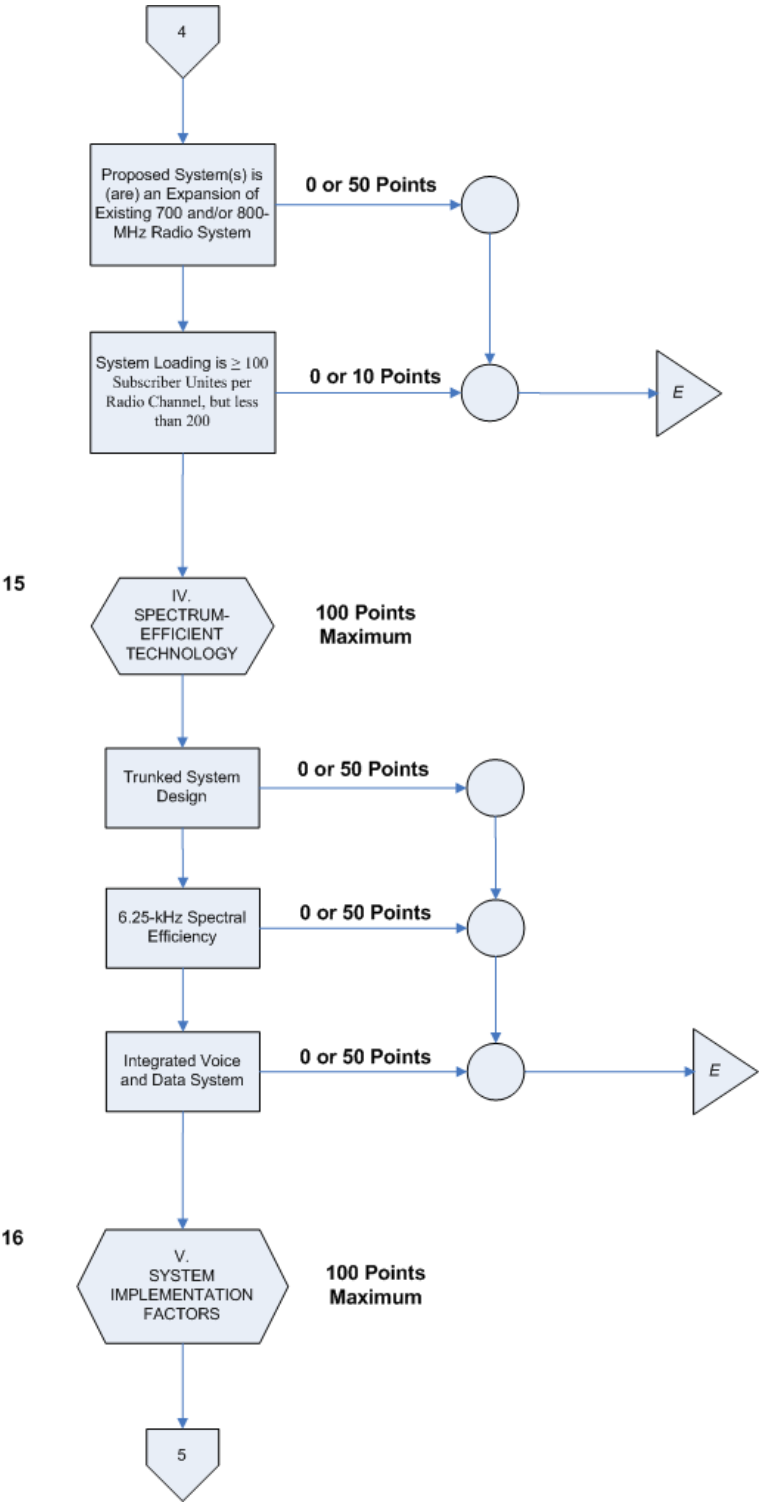


Figure 7, Application Review Flowchart - Page 4 of 8

7.5 Systems Implementation Factors (Category V, Block #16) - 100-point Maximum

Category V (Block #16, Figure 7) scores the applicant on two factors — budgetary commitment and planning completeness. The degree of budgetary commitment is scored on a range of 0 to 50 points (first line in Table 6). An applicant that demonstrates a high degree of commitment in funding the proposed system will receive a higher score. Each applicant will also be scored on the degree of planning completeness, with a scoring range of from 0 to 50 points (second line in Table 6). Applicants are required to submit evidence of financial and budgetary commitment and a timetable for implementing the communications system or systems.

Table 6, Planning for Implementation Criteria and Weights

Implementation Status	Point Value
Degree of budgetary commitment	50
Degree of planning completeness	50

7.6 Geographic Efficiency (Category VI, Block #17) - 100-point Maximum

Category VI (Block #17 in Figure 8) scores applicants on the level of geographic efficiency. Scoring in this category is based upon two subcategories: the ratio of subscriber units to area covered, and the channel-reuse factor. The ratio of subscriber units to area covered measures the level of efficient coverage that a system demonstrates. The higher the ratio (subscriber units divided by square miles of coverage), the more efficient the use of the frequencies. For each application-filing window, the ratio of the number of subscriber units to jurisdictional area covered shall be normalized to a maximum of fifty (50) points (as per the first line in Table 7). This will be done by applying the Normalization Equation that follows Table 7.

The channel-reuse factor is defined as the number of times a channel is reused divided by the jurisdictional area covered. For each application-filing window, as per the second line in Table 7, the channel reuse shall also be normalized to fifty (50) points. This will be done by applying the Normalization Equation that follows Table 7.

Table 7, Geographic Efficiency Criteria and Weights

Geographic Efficiency	Point Value
Ratio of subscriber units to the jurisdictional area covered	50
Level of channel reuse throughout the jurisdictional area covered	50

Normalization Equation

A = Minimum point score = 0; B = Maximum point score = 50; x = Raw score;

Max(x) = Maximum raw score in the application-filing window

Min(x) = Minimum raw score in the application-filing window

Normalized score (x) = $A + [(B-A)/(Max(x)-Min(x))] \cdot [x-Min(x)]$

Equation for normalization = $0 + [(50-0)/(Max(x)-Min(x))] \cdot [x-Min(x)]$

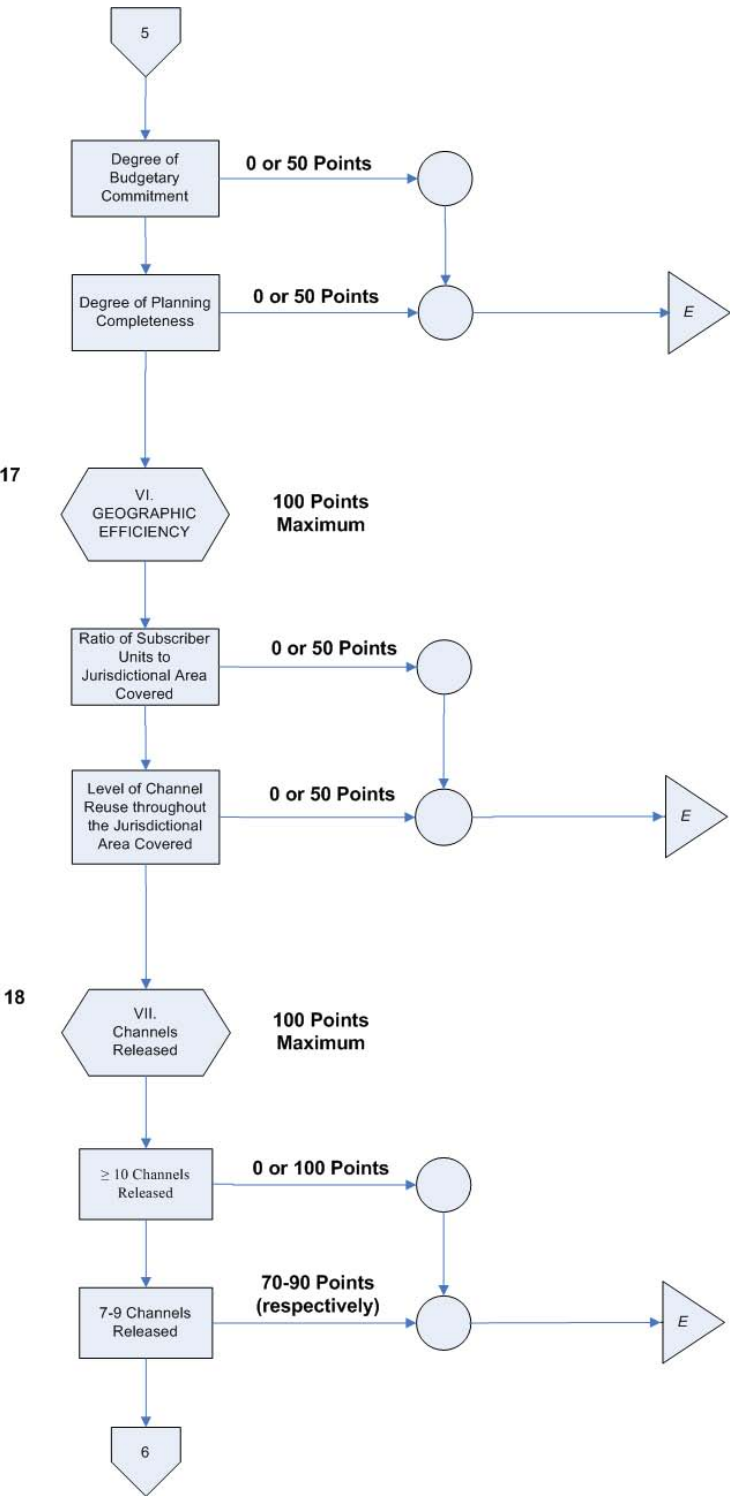


Figure 8, Application Review Flowchart - Page 5 of 8



7.7 Channels Released (Block #18) - 100-point Maximum

Category VII (Block #18 in Figure 8) evaluates the applicant on the number of radio channels¹¹ released if the 700-MHz application is granted to it. As demonstrated in Table 8, the greater the number of channels released, the higher the score that applicant shall be awarded.

The usability of the released radio channels will also be considered in the form of a multiplier ranging from 0.0 to 1.0. Radio channels with greater usability potential will earn the applicant higher points. The FCC-certified frequency coordinators or their representatives (i.e., APCO Local Frequency Advisors for western upstate New York) shall be responsible for evaluating the usability of any channel(s) released.

Table 8, Channel Criteria and Weights

Number and Usability	Point Value
Ten (10) or more channels given back	100
Seven (7) to nine (9) channels given back	70-90
Four (4) to six (6) channels given back	40-60
One (1) to three (3) channels given back	10-30
Usability of the channels by others (i.e., levels of interference, intermodulation, etc.)	0 - 1 (multiplier)

7.8 Final Processing Steps

As shown in Block #19 in Figure 9, points are totaled for each application.

Next, as per Block #20, the applicant's current frequency holdings (if any) are reviewed by the Committee.

Then, as per Block #21, the approved application scores are reviewed by the Committee to determine the proper application prioritization order.

Next, the frequency pool is allotted (Block #22 in Figure 10), and interregional concurrence occurs as necessary (Block #23, also in Figure 10). The Plan is then sent to the FCC for review and approval (Block #24). Upon acceptance by the FCC (Block #25), the RPC notifies (Block #26) the applicant of its channel allotment(s). The applicant shall file the station license(s) with its preferred frequency coordinator (Block #27), who coordinates with the FCC (Block #28).

¹¹ Released radio frequencies eligible for points:

VHF Low Band	25-50 MHz
VHF High Band	150-174 MHz
UHF Band	450-470 MHz/470-512 MHz (T-Band)
800 Band	806-821 MHz/851-866 MHz
NPSPAC Band	821-824 MHz/866-869 MHz



Simultaneously, the applicant shall send a copy of its application to the RPC. Upon confirming that the application for license matches the application for channel allotment, the RPC shall submit a Regional Plan Control Number to the coordinator; and the Regional Plan, the RPUC, and CAPRAD databases are updated. Finally, the FCC grants the license(s) to the successful applicant (Block #29 in Figure 10).

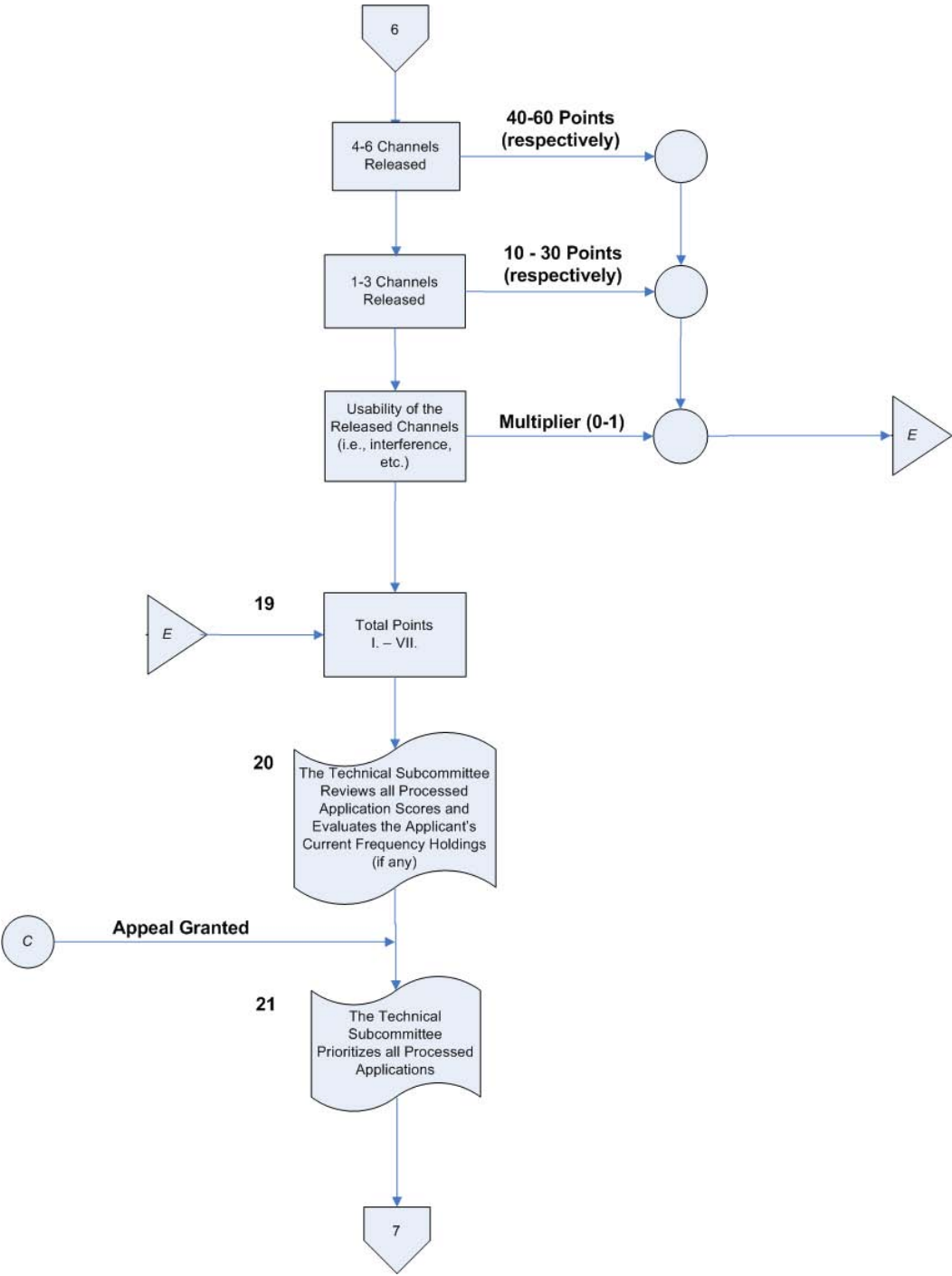


Figure 9, Application Review Flowchart - Page 6 of 8

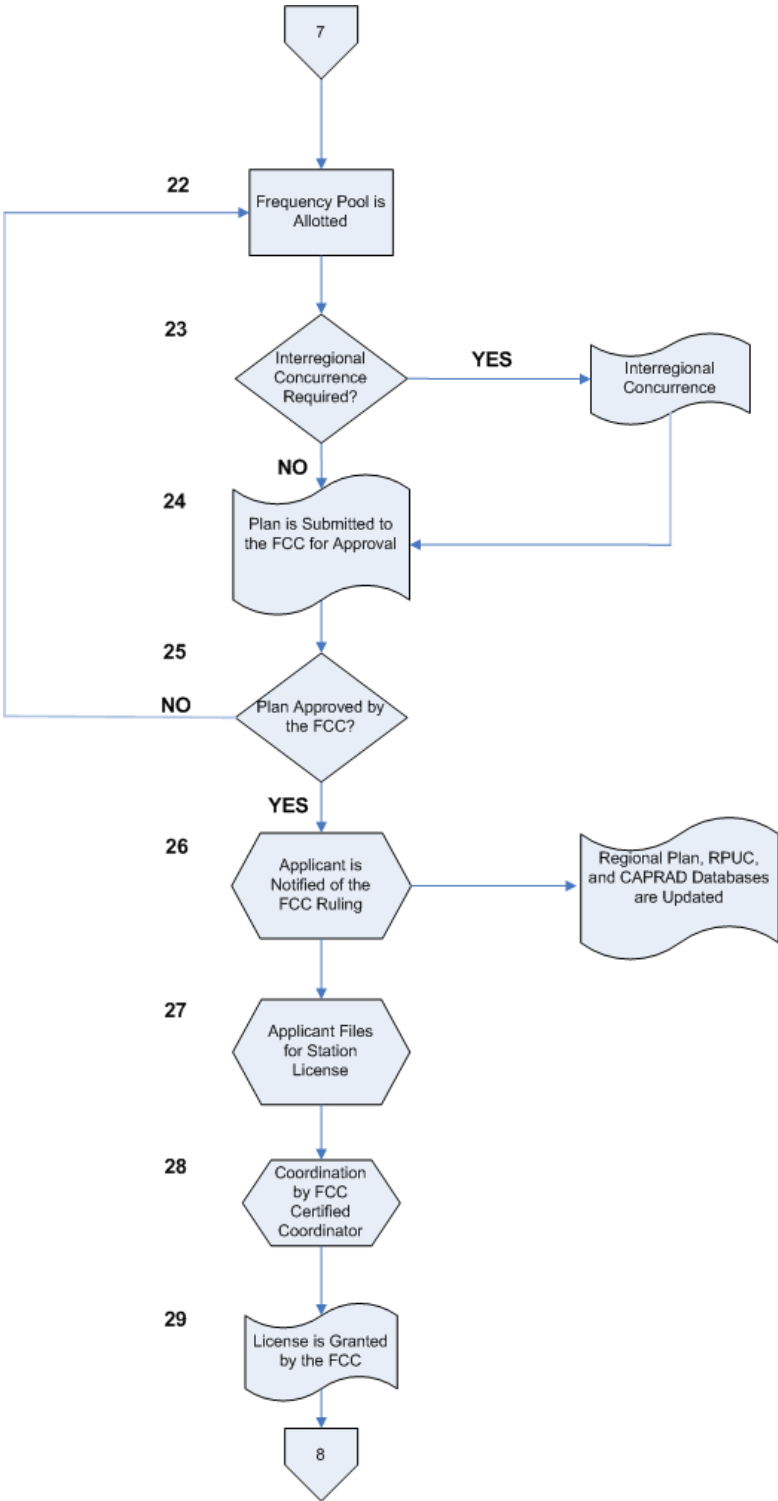


Figure 10, Application Review Flowchart - Page 7 of 8



7.9 Follow-up after Initial Approval

The FCC allows the applicant/licensee up to five (5) years to implement the system. Should system implementation not begin (by, at minimum, an award of contract) within a two-year period, or if the projected channel loading is not attained in accordance with the slow-growth plan, the channels will be returned for reallocation.

System implementation is monitored by the Region 55 Technical Subcommittee to determine if progress is being made (see Block #30 in Figure 11). Monitoring of system implementation by the Region 55 Technical Subcommittee will take place at a minimum of six-month intervals until implementation is complete. If progress is being made, the system is ultimately implemented (Block #32). If progress is not made, the applicant/licensee is warned of the potential consequences of its lack of progress (Block #31).

The Region 55 Technical Subcommittee continues to monitor progress on the implementation of the system. If monitoring indicates that progress is still not being made, the applicant/licensee is notified (Block #33) of pending action to withdraw the channel allotment(s). The notified applicant/licensee can request an extension (Block #34) of time from the RPC to complete its slow-growth plan or can allow the application to be cancelled (Block #35). If the applicant/licensee requests an extension, and the RPC agrees, a concurrence letter acknowledging the applicant's request will be produced by the RPC and sent to the FCC.

If the RPC grants an extension to the applicant/licensee, the system implementation monitoring process will continue and the activities in blocks #30 - #33 will reoccur. If the RPC does not grant an extension, the applicant/licensee and FCC will be notified (Block #36). The notified applicant/licensee can appeal this action or allow the license to be withdrawn (Block #37). If the allotted frequencies are withdrawn, they are added back into the frequency pool (Block #38) and the process begins a second iteration, starting back at Block #1.

If the applicant/licensee appeals the RPC's decision, the FCC appeal process will ensue (Block #39). If the FCC denies the appeal, the RPC and applicant/licensee will be notified (Block #40). If the FCC grants the appeal with channel-allotment changes, the process reverts to Block #22 (frequency pool is allotted). If there are no channel-allotment changes, the process reverts to Block #30 (system implementation is monitored by the RPC).

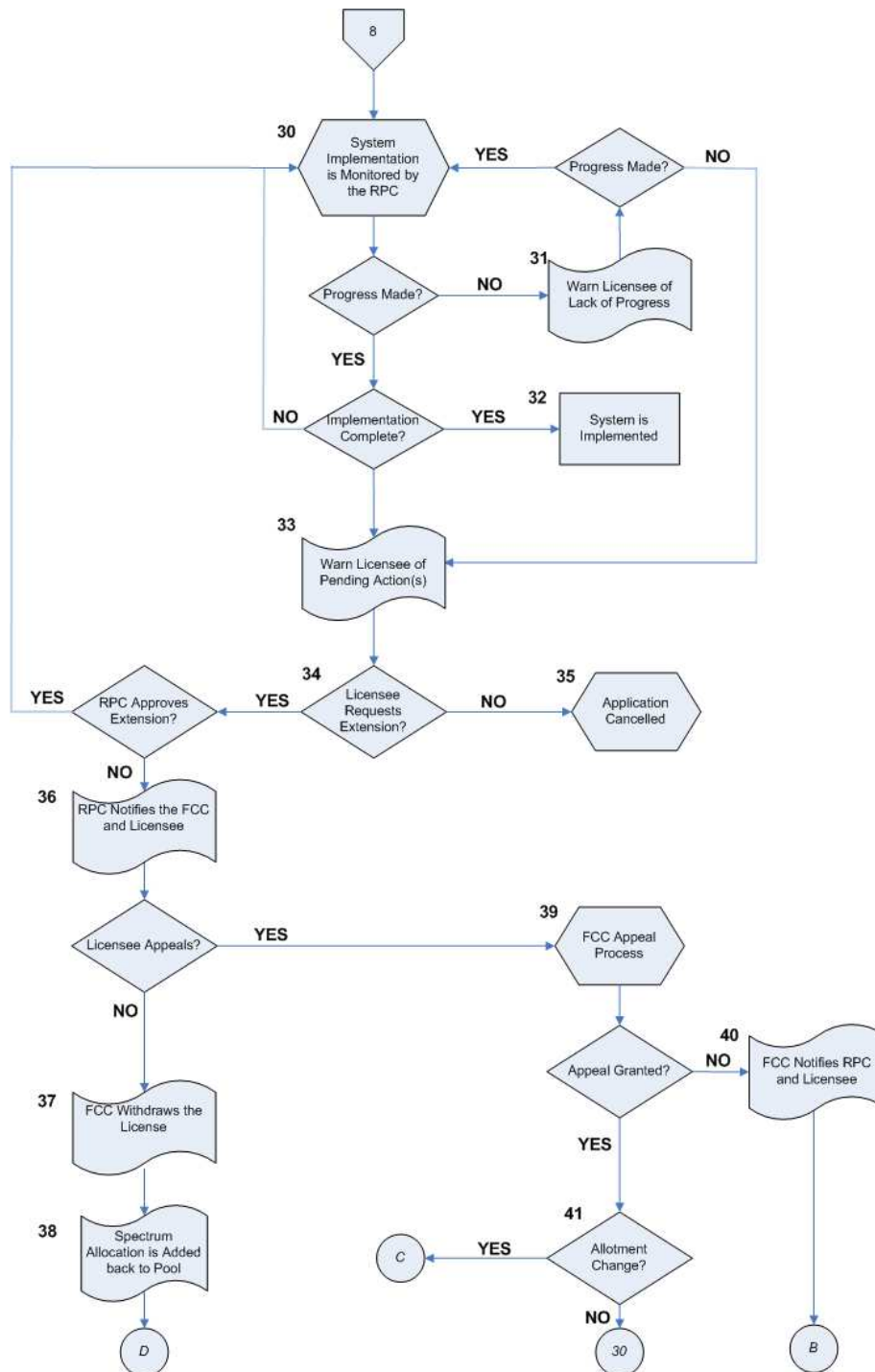


Figure 11, Application Review Flowchart - Page 8 of 8



8. Technical Evaluation

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8. TECHNICAL EVALUATION OF APPLICATIONS

Complete application packages shall undergo technical review according to the procedures described in this section. Figure 12, which follows, provides an overview of the technical evaluation/review process, which considers numerous characteristics of each application. In order for an application package to pass the technical evaluation process, it must adhere to the following conditions:

- The application package supplies the required technical parameters,
- The application package is consistent with the repacked CAPRAD¹² 700-MHz National pre-allotment channel pool for Region 55 and/or an alternative approach acceptable to the RPC¹³ (see Appendix H), and
- The application package must protect licensed assignments (incumbents) and unlicensed allotments under past filing windows.

8.1 Stage I: Is the Application Complete?

All technical parameters must be populated to be processed. The RPC Secretary shall notify the applicant by U.S. certified mail with return receipt if the application package does not meet the requirements stated in this Plan.

8.2 Stage II: Consistent with the CAPRAD¹⁰ 700-MHz National Pre-allotment Channel Pool?

Each application must be checked by the RPC 55 Technical Subcommittee to ensure that its acceptance would not cause harmful interference to existing licensed systems and allotments.

Where applicable, the Adjacent-Channel Coupled Power Ratio (ACCPR) will be computed for each application, and compared to each incumbent.

Each application must be consistent with the CAPRAD 700-MHz National pre-allotment channel pool for Region 55. Any application packages that do not provide the appropriate pool protection as required in Interference-Protection Criteria and System-Design Specifications (in Section 9) will be returned to the applicant, with information regarding other impacting applications. The applicant will be allowed thirty (30) days to respond.

8.3 Stage III: Are there any Conflicts with Other Applications?

All application packages shall be evaluated and prioritized using the application-scoring matrix. If two or more applications are assigned identical scores, the RPUC shall — by consensus —

¹² The channel allotments provided in this Plan reflect the repacking of CAPRAD as per the Second Report and Order, adopted on July 31, 2007.

¹³ During the term that such pool allotments are in effect. Please refer to Section 5, Procedure for Requesting Spectrum Allotments.

order this group of applications relative to each other based upon subjective evaluation of the merits of each.

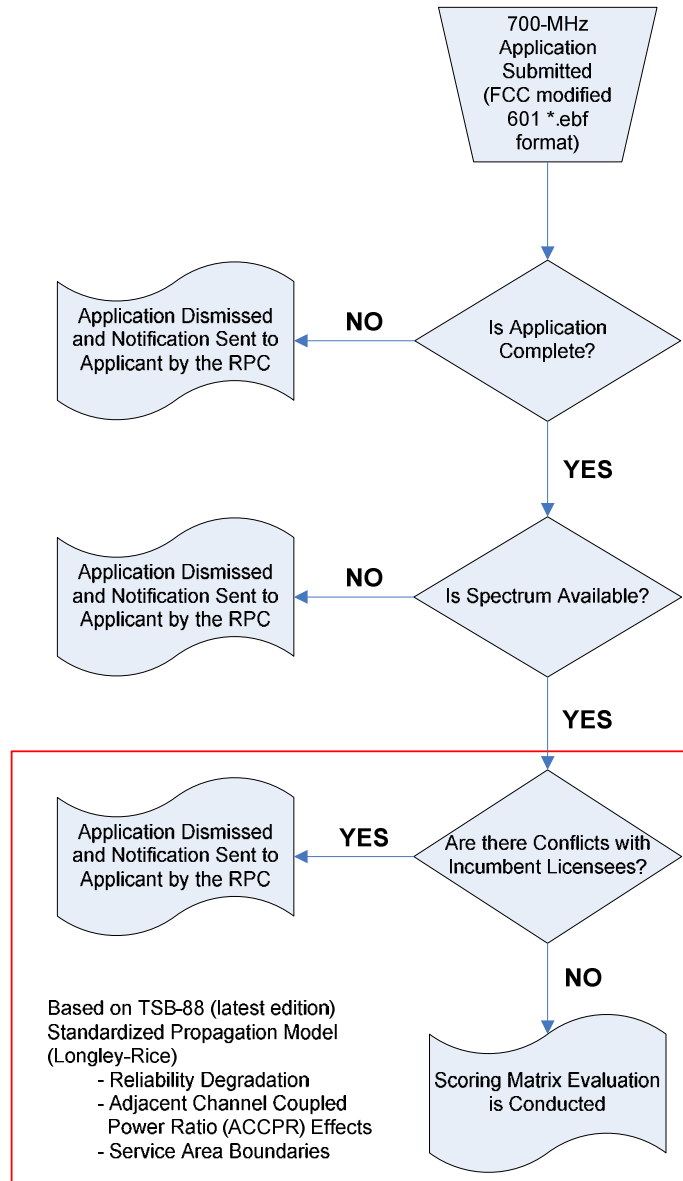


Figure 12, Overview of Technical Evaluation/Review Process



9. Interference Evaluation Procedure

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9. INTERFERENCE-PROTECTION CRITERIA AND SYSTEM-DESIGN SPECIFICATIONS

This section defines the interference-protection criteria, system-deployment constraints, and assumptions that Region 55 employs in its application-evaluation process.

9.1 Recommended System Reliability

It is recommended that proposed facilities in Region 55 be designed to provide 50 dBμ (-82 dBm) received-power levels for reliable portable-coverage operations, and 40 dBμ (-92 dBm) received-power levels for reliable outdoor mobile-coverage operations.

9.2 Coverage- and Interference-Prediction Methodology

Both TSB-88 (latest edition) and the Longley-Rice propagation model in median mode (50/50/50) shall be used to evaluate coverage and interference for proposed systems in Region 55. The Longley-Rice model is used because it is freely available in the public domain and has consistent implementations across propagation-modeling programs of different sources, unlike the Okumura-Hata-Davidson model. All radiated- and received-power levels are referenced to a dipole antenna. Please see Appendix F, Antenna Pattern Information Form.

9.3 Responsible Radiation Control and System Design

In order to promote responsible use of 700-MHz spectrum resources, all applicants are required to control unnecessary radio-frequency (RF) radiation. Therefore, for all proposed facilities within the Region, 80% of the 50 dBμ (-82 dBm) Protected Service Area (PSA) must lie within the jurisdictional boundary plus an eight-kilometer buffer zone. The 50 dBμ (-82 dBm) PSA shall be assessed using Longley-Rice analyses.

9.4 Pool-to-Pool Reliability-Degradation Threshold

Applications for facilities that have been pre-allotted within the National Pool (in-pool assignments) are required to provide co- and adjacent-channel interference protection to other in-pool assignments.

Each in-pool application (which may consist of multiple facilities) must pose no more than 2.5% Area Reliability Degradation (ARD) at 90% reliability levels to any incumbent's protected service area. All facilities (including licensees and all approved allotments) in aggregate must pose no more than 5.0% cumulative area reliability degradation at 90% reliability levels to any incumbent's protected service area.

The process for determining ARD is as follows:

- Compute the baseline Longley-Rice 3-second (minimum) tile coverage for each incumbent (victim) co- and adjacent-channel licensee within its jurisdictional area.

- If any co- or adjacent-channel pool assignment remains unused, treat its jurisdiction/county as having ubiquitous 40 dBμ (-92 dBm) service levels.
- Co- or adjacent-channel pool licenses and or previously accepted facilities shall be protected based upon their facility-specific parameters.
- Evaluate the baseline total number of tiles within the victim jurisdiction that achieve 90% or greater reliability levels using TSB-88 (latest edition) in conjunction with parameters for Channel Performance Criterion (CPC), receiver noise floor, and log-normal standard deviation (σ).
- If any co- or adjacent-channel pool assignment remains unused, use the following as its deployed parameters:
 - Receiver Noise Floor = -124 dBm
 - CPCf = 18 dB
 - $\sigma = 7$ dB
 - These, along with the 40 dBμ (-93 dBm at 800 MHz), give the following reliability throughout the service area:

$$R^{14} = 1 - Q^{15} [(-93 \text{ dBm} - (-124 \text{ dBm}) - 18 \text{ dB}) / 7 \text{ dB}] \approx 97\%$$
- Once a facility-specific application has been granted, the baseline area reliability for co- or adjacent-channel pool licenses and or previously accepted facilities shall be evaluated based upon these facility-specific parameters.
- Evaluate the received-power levels of all proposed facilities at all tiles within the victim jurisdictional area. Combine these into an equivalent interferer using the process outlined in TSB-88 (latest edition).
- Re-evaluate the total number of tiles within each victim jurisdiction that achieve 90% or greater reliability levels, considering the effects of all proposed facilities.
- The ARD is defined as one minus the ratio of the number of tiles at 90% reliability (or greater) considering proposed facilities and the baseline number of tiles at 90% reliability (or greater).

9.5 Outside-to-Pool Reliability-Degradation Threshold

Applications for facilities that have not been pre-allotted within the National Pool (outside-pool assignments) are also required to provide co- and adjacent-channel interference protection to other in-pool assignments.

¹⁴ R = Reliability in decimal, converted to percent.

¹⁵ Marcum's Q-function represents the cumulative area under a Gaussian distribution curve:

$$Q_1(a, b) = \int_b^{\infty} x \cdot \exp\left[-\frac{(x^2 + a^2)}{2}\right] \cdot 10(a \cdot x) \, dx$$

Each outside-pool application (which may consist of multiple facilities) must pose 0% ARD at 90% reliability levels to any incumbent's protected service area. ARD is computed as was outlined in Section 9.4.

This reliability degradation threshold also applies to Region 55 in-pool assignments that are proposed outside of their National Pool county area, but allowed under the Region 55 plan as described in Section 5, Procedure for Requesting Spectrum Allotments.

9.6 Evaluation of Adjacent-Channel Effects

The evaluation of adjacent-channel interference will follow Sections 9.1 through 9.5, except that the effective radiated power of the proposed stations shall be de-rated to account for Adjacent-Channel Coupled Power Ratio (ACCPR) effects. Please refer to Table 9, for the appropriate ACCPR values; note that the channel bandwidth should be larger than the technology-specific emissions bandwidth.

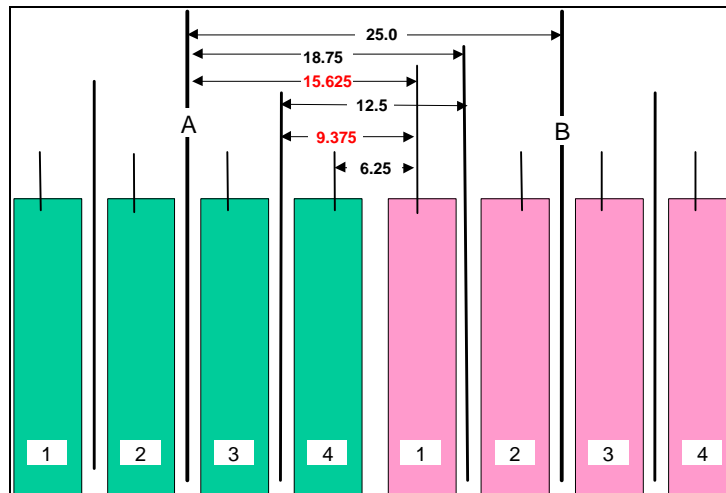


Figure 13, Potential Frequency Separations¹⁶

Table 9, Adjacent-Channel Coupled Power Ratio Values¹⁶

Case	Spacing	ACCPR
25 kHz to 25 kHz	25 kHz	65 dB
25 kHz to 12.5 kHz	18.75 kHz	65 dB
25 kHz to 6.25 kHz	15.625 kHz	40 dB
12.5 kHz to 12.5 kHz	12.5 kHz	65 dB
12.5 kHz to 6.25 kHz	9.375 kHz	40 dB
6.25 kHz to 6.25 kHz	6.25 kHz	65 dB

¹⁶ Adopted from the National Coordination Committee, "Pre-Assignment Rules and Recommendations," July 2002.



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10. Administration of the Low-Power Interoperability Channels

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10. ADMINISTRATION OF THE LOW-POWER INTEROPERABILITY CHANNELS

Purpose

The purpose of this section is to provide guidelines relative to the use of the Low-Power 700-MHz¹⁷ Interoperability Channels under the authority of the RPC as defined by 47 CFR §90.531(b)(3).

Eligibility

The following entities are eligible to use low-power channels under the control of the Regional Planning Committee pursuant to 47 CFR §90.523(a) and (b):

A) State or local government entities

Any territory, possession, state, city, county, town, or similar state or local governmental entity is eligible to hold authorizations in the 769-775-MHz and 799-805 MHz frequency bands.

B) Nongovernmental organizations

A nongovernmental organization (NGO) that provides services, the sole or principal purpose of which is to protect the safety of life, health, or property, is eligible to hold an authorization for a system operating in the 769- to 775-MHz and 799- to 805-MHz frequency bands for transmission or reception of communications essential to providing such services if (and only for so long as) the NGO applicant/licensee:

- 1) Has the ongoing support (to operate such system) of a state or local governmental entity whose mission is the oversight of or provision of services, the sole or principal purpose of which is to protect the safety of life, health, or property;
- 2) Operates such authorized system solely for transmission of communication essential to providing services the sole or principal purpose of which is to protect the safety of life, health, or property; and
- 3) Accompanies all applications it submits with a new, written certification of support (for the NGO applicant to operate the applied-for system) by the state or local governmental entity referenced in paragraph (b)(1) of this section.

Low-Power 700-MHz Channel Use

Frequencies will be used in a simplex or repeater mode as specified within this provision of the Region's Plan for 700-MHz channels. The Plan will combine two (2) channels as contained in 47 CFR §90.531(b)(3) to yield a 12.5-kHz simplex operating frequency. In the repeater mode, four

¹⁷ On July 31, 2007, the FCC adopted the Second Report and Order (FCC 07-132) relocating the narrowband portion of the 700-MHz public-safety communications band to 769-775 MHz and 799-805 MHz.



(4) 700-MHz channels shall be combined to yield a 12.5-kHz transmit frequency and a 12.5-kHz receive frequency.

Use within the Region

The low-power 700-MHz interoperability frequencies are limited to transmissions with effective radiated power (ERP) of no more than two (2) watts. These frequencies can be used at the broad discretion of first responders in one of two methodologies — direct radio-to-radio or simplex operation or as an Incident Area Network (IAN) or other low-power technology requiring a repeater capability. The use of these frequencies for official public safety or public service communications is permitted by a single public safety agency prior to the actual invocation of interoperable communications between two or more public safety agencies. Communications of a personal, non-official purpose are prohibited.

Assignment of Frequencies

Typically, first responders will have broad discretion in the use of these channels. The Incident Commander, as defined by the National Incident Management System (NIMS), shall determine which low-power interoperability channels shall be used for first responders, as well as determine the use of simplex and/or IAN repeater technology.

Modulation

Pursuant to 47 CFR §90.525(a), operation on these channels may utilize digital or analog modulation. Analog operations will utilize the 11K0F3E emission type.

Programming of Frequencies

Eligible licensees are encouraged to program related interoperability frequencies into 700-MHz-capable mobile and portable radios as may be practical pursuant to the Service Assignment tables on the following pages. This programming is not mandatory, as some licensees may not have sufficient capacity in subscriber devices to accommodate these frequencies.

Service Assignments

Tables of repeater, subscriber, and direct or simplex assignments follow as Tables 10, 11, and 12. These assignments notate specific frequencies reserved for EMS, fire, and law-enforcement users. For all other users, Generic Public-Safety/Public-Service frequencies exist that can be used by any eligible licensee as defined by 47 CFR §90.523.

Repeater/Incident Area Network Operation

From the Department of Homeland Security SAFECOM Statement of Requirements¹⁸, “An incident area network (IAN) is a network created for a specific incident.” “This network is temporary in nature.” For the IAN or other repeater operation, the Region will follow the national deployment model; i.e., the lower frequency shall be used for the Repeater transmitter frequency, while the upper channel is employed for mobile/portable transmissions. Repeater

¹⁸ SAFECOM Statement of Requirements, March 10, 2004, Page 6.

operation is identified by the "2" (2-channel) behind the service name, e.g. "7TAC21 meaning 700 MHz (7) Tactical (TAC) Frequency with Repeater (2) frequency 1 (1).

Table 10, Repeater Service Assignments

Frequency Identifier	Repeater Transmitter Channels	Repeater Receiver Channels	Applicable Service
7TAC21	1-2	961-962	Generic Public Safety/Public Service
7TAC22	3-4	963-964	Generic Public Safety/Public Service
7TAC23	957-958	1917-1918	Generic Public Safety/Public Service
7FIRE21	5-6	965-966	Fire
7FIRE22	7-8	967-968	Fire
7MED21	949-950	1909-1910	EMS
7MED22	951-952	1911-1912	EMS
7LAW21	953-954	1913-1914	Law Enforcement
7LAW22	955-956	1915-1916	Law Enforcement

Table 11, Subscriber Service Assignments

Frequency Identifier	Subscriber Transmitter Channels	Subscriber Receiver Channels	Applicable Service
7TAC21	961-962	1-2	Generic Public Safety/Public Service
7TAC22	963-964	3-4	Generic Public Safety/Public Service
7TAC23	1917-1918	957-958	Generic Public Safety/Public Service
7FIRE21	965-966	5-6	Fire
7FIRE22	967-968	7-8	Fire
7MED21	1909-1910	949-950	EMS
7MED22	1911-1912	951-952	EMS
7LAW21	1913-1914	953-954	Law Enforcement
7LAW22	1915-1916	955-956	Law Enforcement

Direct Radio-to Radio or Simplex Operation

Direct or simplex operation is identified by the "1" (1-channel) behind the service name, e.g. "7TAC11 meaning 700 MHz (7) Tactical (TAC) Frequency with "Direct" or simplex communications (1) on frequency 1 (1). Please refer to Table 12, which follows.

Table 12, Simplex Communications Service Assignments

Applicable Service	Channels	Frequency Identifier
Generic Public Safety/Service	1-2	7TAC11D
Generic Public Safety/Service	3-4	7TAC12D
Generic Public Safety/Service	961-962	7TAC13D
Generic Public Safety/Service	963-964	7TAC14D
Generic Public Safety/Service	957-958	7TAC15D
Generic Public Safety/Service	1917-1918	7TAC16D
Fire Incident Management	5-6	7FIRE11D
Fire Incident Management	7-8	7FIRE12D
Fire Incident Management	965-966	7FIRE13D
Fire Incident Management	967-968	7FIRE14D
EMS	949-950	7MED11D
EMS	951-952	7MED12D
EMS	1909-1910	7EMS13D
EMS	1911-1912	7MED14D
Law Enforcement	953-954	7LAW11D
Law Enforcement	955-956	7LAW12D
Law Enforcement	1913-1914	7LAW13D
Law Enforcement	1915-1916	7LAW14D



TV/DTV Interference Protection

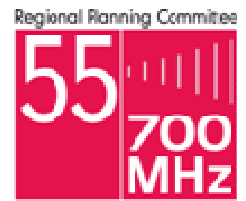
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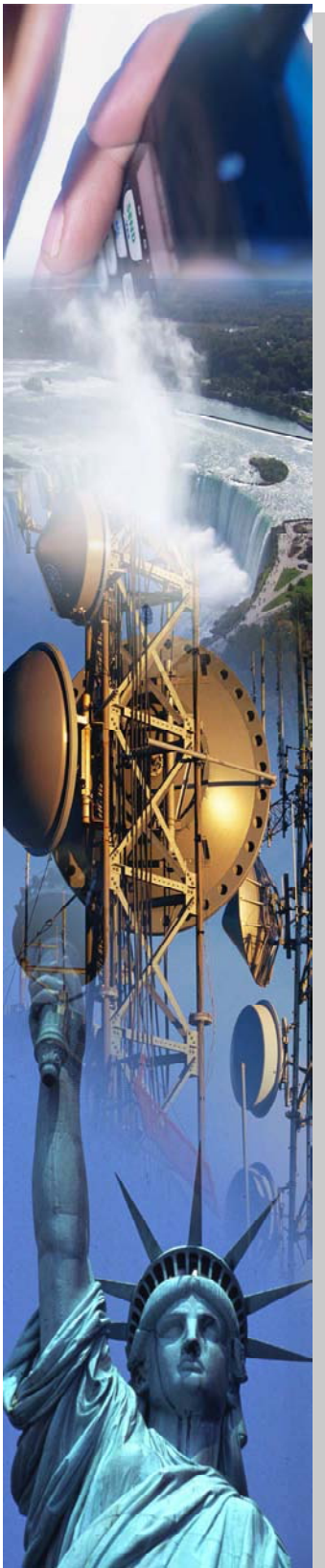
11. TV/DTV INTERFERENCE PROTECTION

In accordance with the Code of Federal Regulations Title 47, Telecommunication, Chapter 1, Part 90, Private Land Mobile Radio Services, Section 90.545, the RPC shall ensure that all existing analog television stations and digital television stations¹⁹ shall be awarded adequate interference protection from public-safety radio systems operating in the 769- to 775-MHz and 799- to 805-MHz bands.

¹⁹ TV channels: 62, 63, 64, 65, 67, 68, and 69.



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12. Frequency Coordination

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12. PROCEDURE FOR FREQUENCY COORDINATION

Region 55 adheres to the 700-MHz General Use channel-allotment pool and shall process all applications and allocate General Use spectrum using the CAPRAD system. Please refer to Appendix H, 700-MHz Channel Allotment Pool as defined in CAPRAD.²⁰

After the application is approved by the Committee using the application-scoring matrix and technical-review procedures, the Region 55 CAPRAD manager shall enter and save the applicant's FCC 601 form(s) into the system. Please see Figure 14, which follows.

Next, CAPRAD will electronically send the application to the applicant's preferred FCC-certified Local Frequency Advisor (LFA). At this time, the CAPRAD system will change the status of the frequency allotments to "pre-license." The licensing process will then follow the application-scoring matrix flowchart beginning with block #24.

²⁰ The channel allotments provided in this Plan reflect the repacking of CAPRAD as per the Second Report and Order, adopted on July 31, 2007, and this RPC's elections for channel block size, combiner separation, and capacity options.

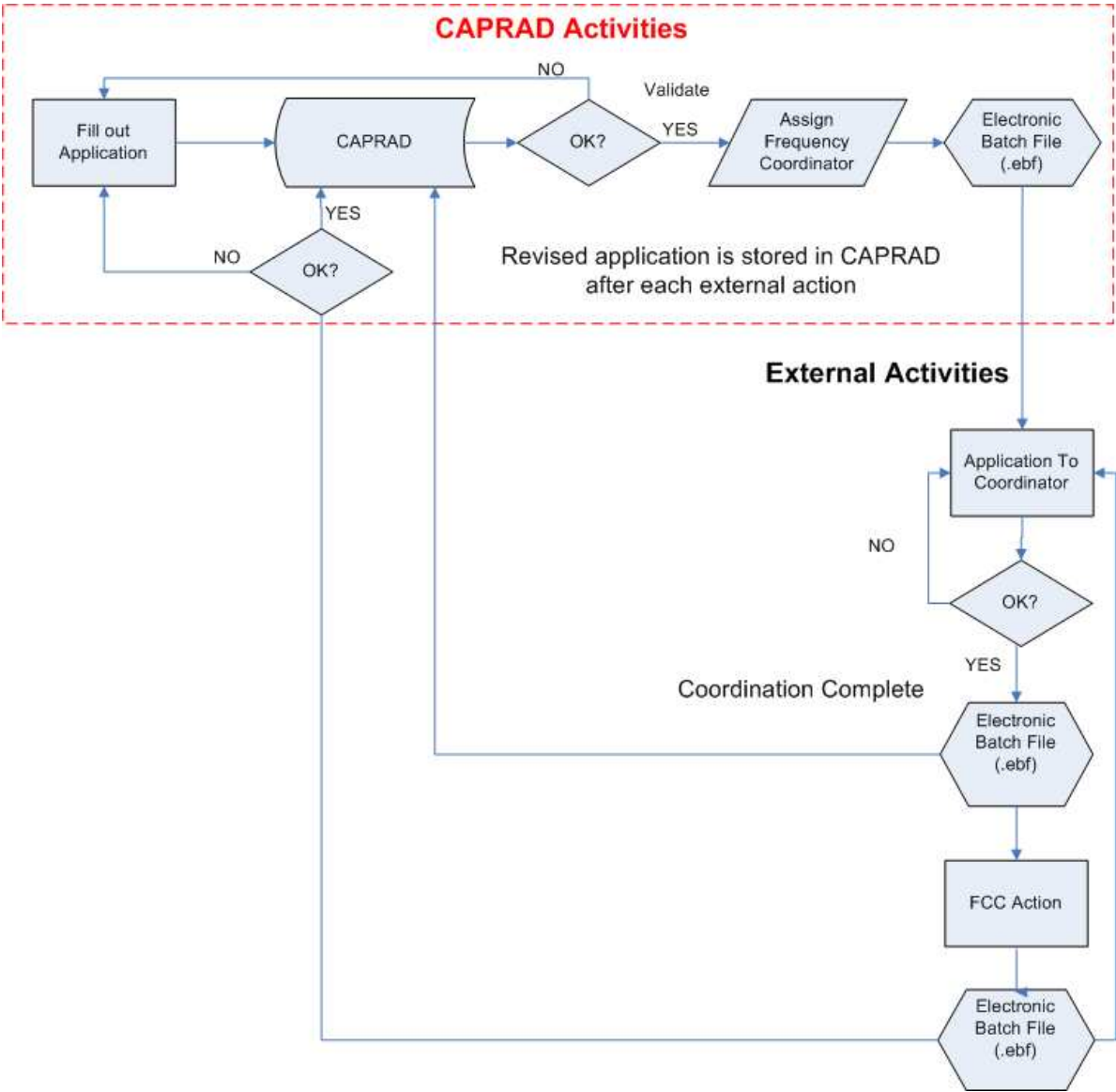


Figure 14, Frequency Coordination Process²¹

²¹ Adopted from the CAPRAD 700-MHz Users Guide, version 1.4.



13. Adjacent-Region Coordination

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13. ADJACENT-REGION COORDINATION

Regional Planning Committee 55 shall contact the chairpersons of the adjacent Regions²² to coordinate the status of their respective plans. Before submitting the Region 55 - 700-MHz Plan to the FCC, Region 55 shall gain the concurrence of each adjacent region.²³

Proposed facilities shall coordinate spectrum usage with all adjacent regions. Regions adjacent to Region 55 are Regions 28, 30, 33, and 36. Region 28 is comprised of Eastern Pennsylvania (east of Harrisburg), Delaware, and southern New Jersey; Region 30 is comprised of eastern upstate New York; Region 33 is comprised of Ohio; and Region 36 is comprised of Western Pennsylvania. The contacts for these regions appear on the FCC Wireless Telecommunications Bureau Website at:

<http://www.fcc.gov/pshs/>

²² An adjacent region is defined as an FCC RPC that physically borders RPC 55 and/or those RPCs within seventy (70) miles of a RPC 55 border.

²³ CAVEAT: Region 33, Ohio, has not granted concurrence for the proposed Region 55 700-MHz Plan. Please refer to Appendix X for correspondence between the Regions regarding this matter.



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